



Commonwealth of Massachusetts.



STATE BOARD OF HEALTH.

BOSTON, APRIL 27, 1877.

In accordance with an Act of the Legislature here quoted, the following circular is issued:—

“Every license issued to the owner of any dog in this Commonwealth shall have printed on the same a description of the symptoms of the disease in animals known as hydrophobia, said description to be supplied on application by the secretary of the board of health.”

The animals known to be *primarily* affected with hydrophobia are chiefly dogs; although cases have occurred in other allied species of carnivorous animals (wolf, fox, hyena, raccoon, badger, cat, skunk, etc.). The disease may be communicated, *by inoculation*, to probably all warm blooded animals; it prevails most in temperate climates, and pretty uniformly at different seasons (in the United States, of 2,407 cases, 671 occurred in spring, 583 in autumn, 580 in summer, 573 in winter). It is thought by the best authorities to affect both sexes in dogs about alike, although there are more cases occurring of male dogs, as there are more male dogs in existence.

There is no evidence that men can have hydrophobia, except by direct inoculation from an infected animal; and all men bitten by mad dogs do not necessarily have the disease, even when no treatment is adopted.

No kinds of dogs, so far as is known, are specially liable to hydrophobia, except in a general way those which live under unnatural conditions of climate, food, etc. Poodle dogs, pet dogs, and those living in heated houses, with little exercise and fed with unsuitable food, etc., half-starved stray dogs, and unacclimated dogs are more likely to have hydrophobia than others. All mad dogs do not necessarily bite other animals, if not interfered with; but it is evident that the more ferocious the nature of the dog, either originally or by education, the greater are the chances of his biting people, and thereby communicating the disease.

The symptoms in dogs are referable to three stages, *in no one of which* is there any dread of water (which is a symptom of the disease in man alone, and not always in him); indeed a mad dog is usually more than commonly thirsty.

In the *first stage*, there is a change in the habits of the dog; he becomes dull, gloomy and silent, seeks to isolate himself in out-of-the-way places, is very restless, lying down and getting up frequently, constantly changing his position and being in a continual state of agitation. The appetite is capricious, and only delicacies are eaten at first, while a little later all manner of strange material, sticks, stones, straw, dung, etc., are greedily taken. The animal appears sullen, and obeys his master's voice less readily than usual, although for a few moments he may seem more lively than is common. Sexual excitement is generally an early symptom. There is seldom an increased disposition to bite in this stage, and there is no frothing at the mouth; but the saliva is capable of communicating the disease. Petted dogs are especially dangerous in this condition, because their bite, if trivial, is liable to be overlooked and not treated, and because they are allowed to lick the face and hands of their owners, and may inoculate any small spot where the skin is broken.

From twelve hours to two or three days later, in the *second stage*, the restlessness becomes more marked; the dog throws about the straw in his kennel, scratches and tumbles cushions, rugs, etc., is constantly in motion and acts as if impelled by some fancies or hallucinations of sight and hearing. He starts as if attacking some object, darts forward, snaps at imaginary objects and then is quiet for a moment; the saliva now becoming free and virulent, he froths at the mouth; his eyes are red and fierce looking, the pupils dilated. He soon escapes all

control, and wanders ferociously about as if impelled by some irresistible force, and attacking, without snarling or barking, any living thing, especially dogs, while there are occasional paroxysms of fury or muscular spasms* in which there is great evident suffering, succeeded by lassitude and momentary insensibility. In these spasms the muscles of the throat are more or less affected, and the voice of the animal becomes dry and husky, somewhat resembling that of a child in croup, while the thirst is inordinate. If kept in a dark, quiet place, these spasms usually do not appear.

In the *third stage*, of paralysis, especially of the mouth and jaw, there is inability to bite, and the great majority of dogs who live so long die of exhaustion, with blindness, inability to swallow, emaciation, etc. The voice is nearly or quite absent throughout this stage.

There is also a form of hydrophobia called "dumb madness," in which the violent or second stage is aborted; the early paralysis of the muscles of the throat and vicinity cause the lower jaw to drop and the mouth to remain open, with inability to make a loud noise. Less than ordinary sensibility to pain, a disposition to attack other dogs and an unusual courage are present in this as in the other form of the disease.

A very few dogs recover without having done any harm, but the safest way is to kill them at once, as soon as the disease is made certain.

Hydrophobia may be communicated to men by the saliva of dogs which have been for some hours dead.

Of course all the symptoms above detailed may not appear in any one individual dog, for no two cases will be strictly and exactly alike; but it is believed that the detection of hydrophobia may be generally made easy by careful observation and attention to these points. In general, it may be said that a sick dog, especially if sullen, with a capricious appetite and unusually inclined to attack other dogs, should be kept under close surveillance, and at once killed if unequivocal signs of hydrophobia appear.

If wounds from rabid animals are thoroughly washed and cauterized *at once* with a white-hot iron, or with nitrate of silver, it is shown by statistics, that an attack of the disease may be avoided in the vast majority of cases. Internal medicines are of no consequence as preventives.

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Secretary of the State Board of Health.

*It should be said that ordinary "fits" or convulsions are not common in hydrophobia, and are usually due to indigestion, etc., etc.